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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/289,327 04/08/99 SAMPSELL

J KLR:7146.021

EXAMINER

MMC2/0425

KEVIN L RUSSELL
CHERNOFF VILHAUER MCCLUNG & STENZEL L.L.
1600 ODS TOWER
601 SW SECOND AVENUE
PORTLAND OR 97204

MARK, R
ART UNIT

PAPER NUMBER

2873
DATE MAILED:

04/25/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

Office Action Summary

Application No.

09/289,327

Applicant(s)

SAMPSELL ET AL.

Examiner

Ricky L Mack

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspond nc address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-112 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32-37, 78-82, 95, 96, 99-102 and 105-112 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 10, 11, 14, 17-25, 27, 38, 40-52, 54, 56, 57, 60, 63-71, 73, 83, 85-87, 89, 90, 92-94, 97, 98, 103 and 104 is/are rejected.
- 7) ☒ Claim(s) 7, 9, 12, 13, 15, 16, 26, 28-31, 39, 43, 53, 55, 58, 59, 61, 62, 84, 88 and 91 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: *Detailed Action*.

DETAILED ACTION***Claim Objections***

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 50-115 have been renumbered 47-112.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 8, 10, 11, 14, 17-25, 27, 38, 40-52, 54, 56, 57, 60, 63-71, 73, 83, 85-87, 89, 90, 92-94, 97, 98, 103 and 104 are rejected under 35 U.S.C. 102 (b) as being anticipated by Kurematsu et al. (5153752).

Kurematsu discloses (see figs. 1-4), as in claims 1-6, 8, 10, 11, 14, 17-25, 27, 38, 40-52, 54, 56, 57, 60, 63-71, 73, 83, 85-87, 89, 90, 92-94, 97, 98, 103 and 104, a light source (20) that generates a light beam having at least two light components (S & P), an optics array (see figs. 1-4) which separates said light beam into at least one light component polarized differently than another light component, said optics array has at least one dichroic filter (24a-24d), two polarizing beams splitters (21, 23), halve-wave plate (22), and liquid crystal panels (25G, 25R, 25B).

Response to Arguments

3. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

4. Claims 7, 9, 12, 13, 15, 16, 26, 28-31, 39, 43, 53, 55, 58, 59, 61, 62, 84, 88 and 91 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 32-37, 78-82, 95, 96, 99-102 and 105-112 are allowed.

6. The following is a statement of reasons for the indication of allowable subject matter: The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claim(s), in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in claim(s) 7, 9, 12, 13, 15, 16, 26, 28-37, 39, 43, 53, 55, 58, 59, 61, 62, 78-82, 84, 88, 91, 95, 96, 99-102 and 105-112, wherein an optical system comprises polarizing beam splitters and a dichroic filters arranged in X-shaped configuration; a dichroic filter sandwiched between two quarter-wave plates, and a filter stack having a cholesteric filter mechanism, as claimed.

The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the dependent claim(s) listed below, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The limitations of dependent claims 7, 9-13, 15, 16, 21, 22, 26 and 28-31 are objected to and are found to be allowable because the limitations cited therein combined with intervening claimed limitations are not taught by the prior art.

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Conclusion

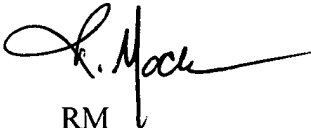
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited for disclosing a polarization converter similar to that of the claimed invention which separates light from the source: Hirose et al. (6176586) and Japanese Patent Document 2000-75246.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricky L Mack whose telephone number is (703) 305-6984. The examiner can normally be reached on Monday-Friday (6:30 AM to 4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (703) 308-4883. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



RM
April 23, 2001

**RICKY MACK
PRIMARY EXAMINER**